



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,181	07/16/2003	William C. Gustafson	ISOT-010	2232
65215 7590 12/26/2007 NEUSTEL LAW OFFICES, LTD. 2534 SOUTH UNIVERSITY DRIVE SUITE 4 FARGO, ND 58103			EXAMINER KASENGE, CHARLES R	
			ART UNIT	PAPER NUMBER
			2125	
			MAIL DATE	DELIVERY MODE
			12/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/622,181

Applicant(s)

GUSTAFSON ET AL.

Examiner

Charles R. Kasenge

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-13 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-13 and 17-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 8-13 and 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Polk et al. U.S. Patent Application Publication 2003/0132310. Regarding claims 8 and 17, Polk discloses a method of operating a plurality of valves in a spray chamber, said method comprising the steps of: determining fluid presence at one or more of said valves (pg. 5, ¶62-63, boom control valves); opening one or more of said valves that have fluid present (pg. 5, ¶64); activating a pump fluidly connected to said valves (pg. 5, ¶63 and 67); and determining if a state change is required of any of said valves and executing said state changes if at least two valves are open (pg. 5, ¶64).

Regarding claims 9 and 18, Polk discloses the method of operating a plurality of valves in a spray chamber of Claim 8, including the step of executing a one valve open recovery routine when if a state change is required to open a second valve and only a first valve is currently open (pg. 5, ¶68).

Regarding claims 10 and 19, Polk discloses the method of operating a plurality of valves in a spray chamber of Claim 9, wherein said one valve open recovery routine is comprised of the

following steps: deactivating said pump (pg. 5, ¶67); opening said second valve after a delay time (pg. 5, ¶68); and reactivating said pump (pg. 5, ¶67-68).

Regarding claims 11 and 20, Polk discloses the method of operating a plurality of valves in a spray chamber of Claim 8, including the step of performing a routine valve scheduler routine upon said valves for maintaining said valves in their respective desired state (pg. 5, ¶68).

Regarding claims 12 and 21, Polk discloses the method of operating a plurality of valves in a spray chamber of Claim 11, wherein said routine valve scheduler routine is comprised of the steps of: (a) energizing a first valve to an appropriate state; and (b) repeating step (a) for a next valve (pg. 5, ¶68).

Regarding claims 13 and 22, Polk discloses the method of operating a plurality of valves in a spray chamber of Claim 11, wherein said routine valve scheduler routine is comprised of the steps of: (a) energizing a first valve to an appropriate state; and (b) repeating step (a) for a next valve after a time period (pg. 5, ¶68).

### *Conclusion*

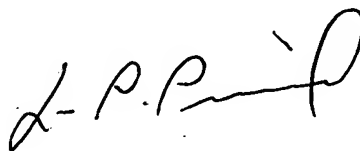
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R. Kasenge whose telephone number is 571 272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/622,181  
Art Unit: 2125

Page 4

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



CK  
December 18, 2007

**LEO PICARD**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**